KORENEV, B. G.

Metod kompensiruyushchikh nagruzok v prilozhenii k zad$_n$che o ravnovesii, kolebaniyakh i ustoychivosti plit i membran. Prikl. Matem. 1 Mekh., 5:6 (1940), 61-72.

K voprosu o primenenii sposoba kompensiruyushchikh nagruzok. Prikl. Matem. 1 Mekh., 6 (1942), 91-94.
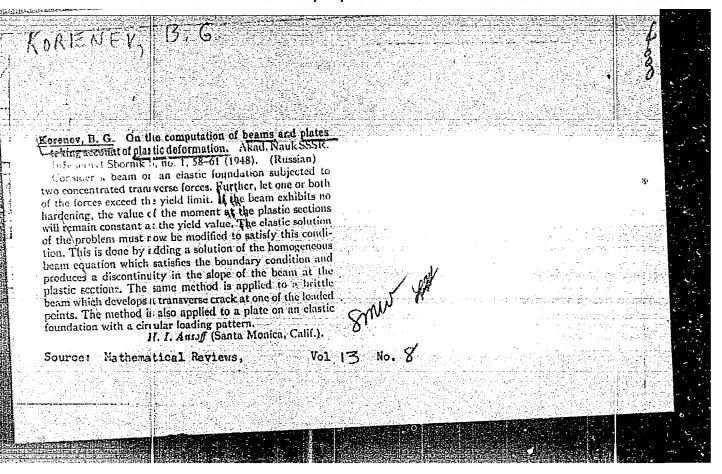
SO: Mathematics in the USSR, 1917-1947
     Edited by Kurosh, A.G.,
     Markusevich, A.I.
     Rashevskiy, P.K.
   Moscow-Leningrad, 1948

already been considered by other investigators, but the solu-
tions given by the author require less involved calculations.
— I. S. Sokolnikoff (Los Angeles, Calif.).

KORENEV, B. G.

Korenev, B. G., "Round plates on an elastic foundation", in the collection:
Issled. raboty po inzh. konstruktsiyam, Issue 1, Moscow, 1948, p. 131-74, -
Bibliog: 7 items.

SO: U-3261, 10 April 53, (Letopis 'Zhurnal 'nykh Statey, No. 11, 1949).

KORENEV, B.G

Korenev, B. G. On the computation of beams and plates taking account of plastic deformation. Akad. Nauk SSSR. Inžener. Sbornik., no. 1, 58–61 (1948). (Russian)

Consider a beam on an elastic foundation subjected to two concentrated transverse forces. Further, let one or both of the forces exceed the yield limit. If the beam exhibits no hardening, the value of the moment at the plastic sections will remain constant at the yield value. The elastic solution of the problem must now be modified to satisfy this condition. This is done by adding a solution of the homogeneous beam equation which satisfies the boundary condition and produces a discontinuity in the slope of the beam at the plastic sections. The same method is applied to a brittle beam which develops a transverse crack at one of the loaded points. The method is also applied to a plate on an elastic foundation with a circular loading pattern.
     H. I. Ansoff (Santa Monica, Calif.).

Source: Mathematical Reviews,   Vol 13 No. 8

KORENEV, B.G., doktor tekhnicheskikh nauk, professor, redaktor;
VOL'MIR, A.S., kandidat tekhnicheskikh nauk, redaktor.;
PUL'KINA, Ye.A., tekhnicheskiy redaktor.

[Studies in the dynamics of structures] Issledovaniia po
dinamike sooruzhenii. Pod red. B. G. Koreneva. Moskva, Gos.
izd-vo stroitel'noi lit-ry. 1951. 159 p.   (MLRA 8:9)
[Microfilm]

1. Moscow. Tsentral'nyy nauchno-issledovatel'skiy institut promysh-
lennykh sooruzhenii.
        (Structures, Theory of)

KORENEV, B. G.

USSR/Physics - Elasticity, Flexure   21 May 51

"Flexure in an Infinite Plate Lying on an Elastic Foundation," B. G. Korenev, Cen Sci Res Inst of Industrial Structures

"Dok Ak Nauk SSSR" Vol LXXVIII, No 3, pp 417-420

Korenev considers certain problems on the bend in unbounded plate having const thickness and lying on elastic base. Results obtained give soln of problem on the bend in plate due to the loads acting in the area of circular ring, particularly for certain new models of the elastic base. Submitted 24 Mar 51.

186T100

KOREIIEV, B. G.

USSR/Physics - Elasticity   21 Jul 51

"The Bend in a Plate, Lying on an Elastic Founda-
tion, Due to Loads Distributed Rectilinearly and
Rectangularly," B. G. Korenev, Cen Sci Res Inst of
Industrial Constructions

"Dok Ak Nauk SSSR" Vol LXXIX, No 3, pp 411-414

Considers certain problems on the bend (flexure)
of an unbounded plate lying on an elastic basis,
with the load distributed over the area of:
rectangle, line, and section of a line. Sets up the
eqs in integral form. Submitted by Acad A. I.
Nekrasov 24 May 51.

211T89

KORENEV, B. G., Prof.;   SYSOEV, V. I.

Vibration

Method of damping the swaying of tower-like structures.   Biul. stroi. tekh.   10, No. 5, 1953.

KORENEV, B.G., professor, doktor tekhnicheskikh nauk; RUCHIMSKIY, M.N.,
kandidat tekhnicheskikh nauk, nauchnyy redaktor; BERDICHEVSKIY, G.I.,
redaktor; MEDVEDEV, L.Ya., tekhnicheskiy redaktor.

[Problems in calculations for girders and plates on a cushion]
Voprosy rascheta balok i plit na uprugom osnovanii. Moskva, Gos.
izd-vo lit-ry po stroitel'stvu i arkhitekture, 1954. 230 p.
(MLRA 8:1)

(Girders) (Elastic plates and shells)

KORENEV, B.G., professor; RUCHIMSKIY, M.M., kandidat tekhnicheskikh nauk; ROSTOVTSEVA, M.P., redaktor izdatel'stva; TOKER, A.M., tekhnicheskiy redaktor.

[Some problems of dynamic stresses in girders with an elastic support] Nekotorye zadachi dinamiki balok na uprugom osnovanii. Moskva, Gos. izd-vo lit-ry po stroit. i arkhitekture, 1955. 42 p. (Moscow. TSentral'nyi nauchno-issledovatel'skii institut promyshlennykh sooruzhenii. Nauchnoe soobshchenie, no.20).

(MLRA 9:11)

(Girders)

124-57-1-937

Translation from: Referativnyy zhurnal, Mekhanika, 1957, Nr 1, p 130 (USSR)

AUTHOR: Korenev, B. G.

TITLE: On the Calculation of an Infinite Plate Supported by an Elastic
            Foundation, With Consideration of Plastic Deformations (O
            raschete neogranichennoy plity, lezhashchey na uprugom
            osnovanii, s uchetom plasticheskikh deformatsiy)

PERIODICAL: V sb.: Issledovaniye prochnosti, plastichnosti i polzu-
            chesti stroit. materialov. Moscow, 1955, pp 183-201

ABSTRACT: Utilizing the concept introduced by the author on the angular
            deformation loading (Inzhenernyy sb., 1948, Vol 5, Nr 1) a
            calculation method is given for beams and plates supported by
            an elastic foundation, with due consideration of the plastic de-
            formations. The calculation method shown for beams on a
            framework foundation was earlier published in a book by the
            same author (RzhMekh, 1955, abstract 351 K). In the calcula-
            tion of infinite plates on a framework foundation it is assumed
            that the percentual reinforcement in the radial and annular
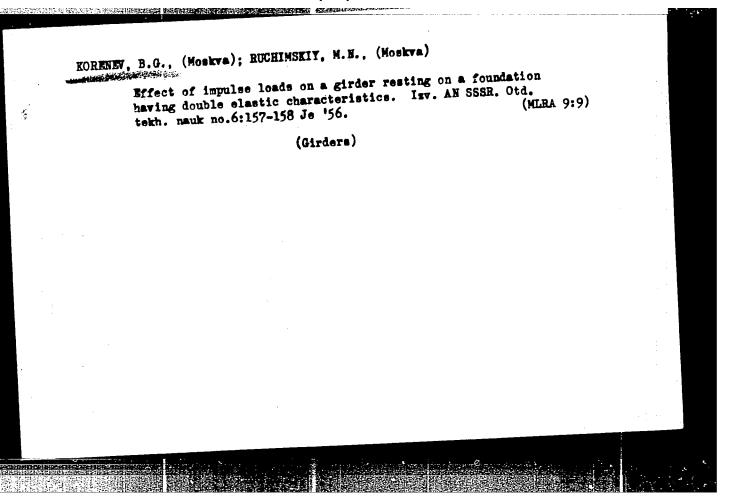   directions, as well as above and below the plate, is the same

Card 1/2

124-57-1-937

On the Calculation of an Infinite Plate Supported by an Elastic Foundation (cont.)

as that of a plate that is uniformly loaded along a circle. It is assumed that during an increase in the loading, once the creep limit has been attained in the lower reinforcement system, the radial and tangential moments under the load will remain constant and equal to the limit moment. Thereupon the upper re- inforcement system will begin to function and a second range of plastic deform- ations will come into being. The appearance of such a range (that of an annular hinge) is assumed as the condition of the limit state of the plate. The calculation method is based on the solution for a plate that is loaded along two concentric circumferences having certain peculiarities which produce a discontinuity of tangential moments along the circumferences, while the continuity of the de- flections, radial moments, and transverse forces is preserved. The area in which the elastic solution yields an excess value of the tangential moment relative to the limit moment is divided into a number of annular areas wherein the intensity of the discontinuous loading along each ring (including the angular deformations) is determined from the requirement that the tangential moment does not anywhere exceed the limit moment. Trial calculations have shown that this device affords a three-fold increase in the load transfer. The results of destructive tests on thin plates, adduced here, confirm qualitatively the calculation principles enunciated. The applicability of the methods for other types of homogeneous elastic foundations is affirmed.

Card 2/2   1. Plates--Deformation--Mathematical analy-   M.I.Gorbunov-Posadov
        sis   2. Beams--Deformation--Mathematical analysis

KORENEV, B.G., (Moskva); RUCHIMSKIY, M.N., (Moskva)

Effect of impulse loads on a girder resting on a foundation
having double elastic characteristics. Izv. AN SSSR. Otd.
tekh. nauk no.6:157-158 Je '56.   (MLRA 9:9)

(Girders)

SOV/124-57-5-5908

Translation from: Referativnyy zhurnal. Mekhanika, 1957, Nr 5, p 128 (USSR)

AUTHOR: Korenev, B. G.

TITLE: Some Aspects of the Analysis of Beams and Plates Resting on an
            Elastic Foundation (Nekotoryye voprosy rascheta balok i plit,
            lezhashchikh na uprugom osnovanii)

PERIODICAL: Sb. tr. Mosk. inzh.-stroit. in-t, 1956, Nr 14, pp 145-167

ABSTRACT: The author examines two problems: 1) the problem of calculating
            constant-thickness beams and plates within the elastic range, and
            2) the problem of calculating beams and plates with allowance made
            for the plastic deformations that occur within their reinforcements.
            The author first solves the problem of the flexure of an infinite plate
            subjected to a lateral load and to a uniformly distributed tensile
            stress produced by constant forces p_0 acting upon the plate's middle
            surface. Various means are used to simulate an elastic foundation.
            In particular, the foundation is simulated by a semi-infinite elastic
            solid that is either isotropic or has an elasticity modulus which
            varies exponentially. Various kinds of lateral loads are assumed
            in the particular examples examined. In one case, for instance,

Card 1/2

SOV/124-57-5-5908

Some Aspects of the Analysis of Beams and Plates Resting on an Elastic Foundation

the lateral load distribution varies in accordance with the law $q = a \cos \alpha x \cos \beta y$; in another case the load is uniformly distributed over a rectangular area; in yet another case it is distributed along a straight line $y = 0$; in still another case it is applied over a number of circular areas. Examined also is the problem of the flexure of an infinitely long beam subjected to a concentrated force and to a concentrated moment which varies in accordance with the law $q = a \cos \alpha x$. The author affirms that it is possible to calculate finite beams and plates by regarding them, for calculation purposes, as being finite portions of an infinite beam or plate. Examined next is an infinite plate resting on a continuous elastic foundation. The load applied to the plate is uniformly distributed along a circular circumference having a reduced radius that is small as compared with unity. Cal ulations are performed for the case of a plate having a hole through it and being acted upon by the forces P, which are applied along the rim of the hole. The foundation is assumed to be elastic with respect to the bearing coefficient. First, the elastic problem is examined. The method of discontinuous solutions is used to take into account the plastic deformations that occur in an annular reinforcement. Other approximate methods for solving the problem are suggested also.

A. G. Ishkova

Card 2/2

GOL'DENBLAT, I.I.; KOROLEV, B.O.; SIZOV, A.M.

Snow leads in the building norms and regulations. Stroi.prom.34 no.6:25-27 Je '56.   (MIRA 9:9)

1.TSentral'nyy nauchno-issledovatel'skiy institut promyshlennykh seorusheniy.
                    (Roofs)

KORNEV, B.G.,

Steady temperature fields in a thin plate and rod supported by a
continuous homogeneous foundation. Dokl.AN SSSR 107 no.2:225-228
Mr '56.   (MIRA 9:7)

1.TSentral'nyy nauchno-issledovatel'skiy institut promyshlennykh
soorusheniy.Predstavleno akademikom M.A.Lavrent'yevym.
         (Elastic plates and shells)

KORENEV, B.G., doktor tekhnicheskikh nauk, professor, redaktor; YEGOROVA,
N.O., redaktor izdatel'stva; STEPANOVA, E.S., tekhnicheskiy
redaktor

[Studies in structural dynamics] Issledovaniia po dinamike sooruzhenii;
sbornik statei. Pod red. B.G.Koreneva. Moskva, Gos.izd-vo lit-ry
po stroit. i arkhit., 1957. 182 p.   (MIRA 10:9)

1. Akademiya stroitel'stva i arkhitektury SSSR. TSentral'nyy nauchno-
issledovatel'skiy institut stroitel'nykh konstruktsiy.
        (Structures, Theory of)

124-58-9-9507

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 9, p 7 (USSR)

AUTHOR: Korenev, B.G.

TITLE: On the Starting Resonance (O puskovom rezonanse)

PERIODICAL: V sb.: Issled. po dinamike sooruzheniy. Moscow, Gos.
             izd-vo lit. po str-vu i arkhitekt., 1957, pp 162-183

ABSTRACT: The forced vibrations of a system with a single degree of
freedom are investigated by means of Van der Pol's method for
the case when the amplitude and frequency of the driving force
vary with time according to some law. Also investigated is
the influence of the extinction of the vibrations according to
Ye. S. Sorokin's hypothesis (V sb.: Issled. po dinamike sooru-
zheniy. Moscow, Gos. izd-vo lit po str-vu i arkhitekt., 1951)
The examination comprises cases in which the amplitude of the
driving force varies exponentially and incrementally under the
condition that the frequency of the driving force varies in pro-
portion to time, and also for the case when the frequency of
the driving force is either a step function or a trigonometric
function of the time. The solutions of almost all the problems
are obtained in implicit form.   N. V. Butenin

Card 1/1
1. Vibration--Mathematical analysis   2. Resonance--Mathematical analysis
3. Mechanics--Theory

ABSTRACT: The present work investigates the problem of heat waves in
            plates with sufficiently low height h. The temperature is
            assumed to be constant with respect to thickness; the specific
            thermal capacity c, the density ρ, and the heat conduction
            coefficient λ are assumed as being constant. The coordinate
            axes x and y are assumed to be located in the central plane
            of the plate. Here two boundary conditions for the planes
            $z = \pm h/2$ are investigated: 1.) Both planes are adiabatic
            boundaries. This case is identical with the plane problem of
            thermal waves in an infinite cylinder. 2.) A thermal exchange
            occurs with the medium in both planes, which can be described
            by boundary conditions of the third kind. In these two cases
            the problem of thermal waves has much in common with the
            problems of the bending of plates on an elastic base.

            For the plane problem of thermal waves
            $$\partial^2 T/\partial x^2 + \partial^2 T/\partial y^2 = (1/a)\partial T/\partial t + F(x,y) \sin \omega t$$

Card 1/3

PA - 2045

Some Plane Problems of the Theory of Thermal Waves (Russian).

applies if the first boundary condition is satisfied. Here
$T(x,y,t)$ denotes the temperature, $F(x,y)$ - the law of distri-
bution of the thermal sources which (without destruction of
generality) are assumed to be only in the phase $\sin \omega t$.
(ω - circular frequency, $a = \lambda/cq$). In the case of $F(x,y)=0$
it applies that $T(x,y,t) = \varphi(x,y) \cos \omega t + \varphi_1(x,y)\sin \omega t$.

The author then passes on to dimensionless polar coordinates,
in which case the determination of $\varphi(x,y)$ suffices; next, the
complete solution of the problem is found with the aid of the
equations $\nabla^2 \nabla^2\varphi + (\omega/a)^2 \varphi = 0$ and $\varphi_1 = (a/\omega) \nabla^2 \varphi$.

The solution of this differential equation of the fourth order
is sufficiently well worked out in the theory of the bending
of plates, which simplifies computation. In detail the follow-
ing problems are investigated:
A punctiform source with the intensity $Q \sin \omega t$ lies upon
an unlimited plate, in which case φ differs only by a constant
factor from HERTZ' solution for a force acting upon a
swimming plate.

Card 2/3

PA - 2092

AUTHOR: KORENEV,B.G.
TITLE: Thermal Waves in a Thin Unlimited Plate Resting upon a Massive
            Homogeneous Base. (Russian)

PERIODICAL: Doklady Akademii Nauk SSR, 1957, Vol 112, Nr 2, pp 221-223
            (U.S.S.R.)
            Received: 3 / 1957   Reviewed: 3 / 1957

ABSTRACT: Let it be assumed that temperature is constant in the vertical
            cross section of the thin plate (of the thickness h). The spe-
            cific thermal capacity c, the density ϱ, and the thermal conduc-
            tion coefficient λ are assumed to be constant, and the coordi-
            nate axes x and y are in the central plane. Let boundary condi-
            tions of the third kind be assumed on the upper boundary sur-
            face, while the lower plane of the plate is assumed to be in
            close contact with the massive base which is homogeneous in the
            planes which are parallel to Oxy. This problem has much in common
            with the problems relating to the bending of plates on a continu-
            ously elastic base and it is also closely connected with some of
            the thermal conduction problems previously dealt with by the
            author.
            First, an auxiliary problem is solved: Thermal sources are applied
            to an unlimited plate: $q_3 = A_1 \sin \omega \sin \alpha x \sin \beta y +$
            $+ A_2 \cos \omega t \sin \alpha x \sin \beta x$. By the upper (plane) boundary surface

Card 1/3

            the case of the action of a single source changing is in accord-
            ance with the law $\sin \omega t$ and the temperature of the upper
            boundary surface of the base changes in accordance with the law
            $T_1 = K_1(r) \sin \omega t + K_2(r) \cos \omega t$. Herefrom there then follows

PA - 2092

Thermal Waves in a Thin Unlimited Plate Resting upon a Massive
Homogeneous Base. (Russian)

without difficulty a dependence between A_3, A_4 and A_5, A_6. The
here found relations between the coefficients $A_1, A_2, A_3, A_4, A_5, A_6$
are explicitly given. Without disturbing general conditions it
suffices to deal with case $A_1 \neq 0$, $A_2 = 0$; the function resulting
for T is explicitly given. This formula is also specialized for
the case that a punctiform thermal source $Q \sin \omega t$ acts upon
the plate. On the strength of the results obtained it is easily
possible to solve a number of other problems concerning the
action brought to bear by heat sources on to a plate and on to a
rod. If the base is a homogeneous half-space, the problem of
thermal waves in a half-space with the sources $\sin \alpha x \sin \beta y$
$\sin \omega t$ on the boundary remains to be dealt with.

ASSOCIATION: Not given
PRESENTED BY:
SUBMITTED:
AVAILABLE: Library of Congress

Card 3/3

PA - 2244

AUTHOR   KORENEV, B.G.
TITLE   A Die (Stamp) lying on elastic Semispace whose Modulus of Elasticity
              is a Power Function of Depth. (Shtamp, lezhashchiy na uprugom polu-
              prostranstve, modul' uprugosti kotorogo yavlyayetsya stepennoy
              funktsiyey glubiny.)

ABSTRACT   First some preliminary works bearing on the matter are mentioned.
              It is of interest to increase the class of models with elastic found-
              ation. The present paper has the following aim: 1) Formulation of
              the problem of a die resting on a foundation with homogeneous axial-
              ly-symmetric core. I.e. the lowering of the point (x,y) of the under-
              ground on the strength of the action of a vertical uniform force
              which is applied at the point (ξ,η) is only a function of the dis-
              tance between these points: $K(r) = K(\sqrt{(x-\xi)^2 + (y-\eta)^2})$.
              2) The problem is solved for the case in which the modulus of elasti-
              city of the foundation changes with increasing depth according to
              an exponential law.
              First the equations for the lowering are given for the case that the
              load $p(x,y)$ acts on the surface of the foundation. The equations of
              this problem are generalized dual equations. They are specialized
              here for the axially-symmetric case and also for the problem of the
              stamp with the radius R which is lowered by $w_0(r)$. The solution of
              this system of equations is known for a special case, but it is of

Card 1/3

KORENEV, B.G., prof., doktor tekhn. nauk, red.; AFANAS'YEV, A.M., kand. tekhn. nauk, nauchnyy red.; GORYACHEVA, T.V., red. izd-va.; EL'KINA, E.M., tekhn.red.

[Calculating elastically based plates; collection of articles] Voprosy rascheta plit na uprugom osnovanii; sbornik statei. Pod red. B.G. Koreneva. Moskva, Gos. izd-vo lit-ry po stroit., arkhit. i stroit. materialam, 1958. 119 p.   (MIRA 11:10)

1. Akademiya stroitel'stva i arkhitektury SSSR. Institut stroitel'nykh konstruktsii.
              (Elastic plates and shells)
              (Concrete slabs)

KORENEV, B.G.; ZHILINSKIY, K.A.; BUNIN, N.N. [translator]; BUNKIN, G.I.
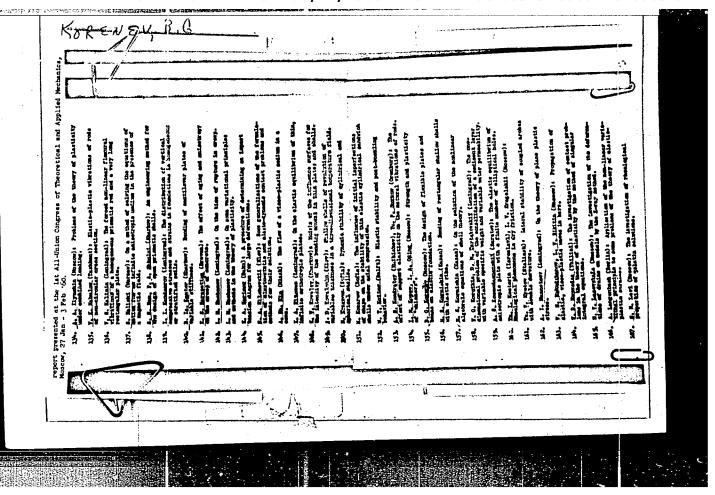[translator]; GRISHINA, M.M. [translator]

Reviews and bibliography. Osn., fund.i mekh.grun. no.6:
30-3 of cover '59.   (MIRA 13:4)
(Bibliography--Foundations) (Bibliography--Soil mechanics)

KORENEV, R.G

report presented at the 1st All-Union Congress of Theoretical and Applied Mechanics, Moscow, 27 Jan - 3 Feb '60.

PHASE I BOOK EXPLOITATION   SOV/4523

Korenev, Boris Grigor'yevich

Nekotoryye zadachi teorii uprugosti i teploprovodnosti, rashayemyye v besselevykh funktsiyakh (Certain Problems of the Theory of Elasticity and Heat Conductivity Solvable in Bessel Functions) Moscow, Fizmatgiz, 1960. 458 p. 5,000 copies printed.

Eds.: M.N. Ruchimskiy, and I.A. Markuzon; Tech. Ed.: N.A. Tumarkina.

PURPOSE: This book is intended for engineers, physicists, mathematicians, and technicians.

COVERAGE: The book contains essentials of the theory of Bessel functions and selected cases of their application to solutions of problems in the theories of applied elasticity and heat conductivity. The theories of elasticity and oscillation, related problems, and special methods of procedure such as the initial-parameter method are given. Numerous methods used in the applied theory of elasticity and described in this work have not yet found a sufficiently wide application in solving theoretical problems of heat transfer. According to the author, it is more important for those working in this field to use the opportunities for wide application of results obtained while solving various prob-

Card 1/8

Certain Problems (Cont.)   SOV/4523

lems of the theory of elasticity than to follow strictly the content of the in-
dividual chapters in the book. No personalities are mentioned. There are 172
references: 134 Soviet (including 8 translations), 18 German, and 20 English.

TABLE OF CONTENTS:

Card 2/8

Designing a beam on an elastic foundation for the effect of a
brief and suddenly applied load. Stroi. mekh. i rasch. soor. 4
no.3:25-30 '62.   (MIRA 15:6)
              (Beams and girders)

KORENEV, B.G.; CHERNIGOVSKAYA, Ye.I.; BORODINA, I.S., red.izd-va;
GOL'BERG, T.M., tekhn. red.

[Calculations for plates on an elastic foundation]Raschet plit
na uprugom osnovanii; posobie dlia proektirovshchikov. Moskva,
Gosstroiizdat, 1962. 354 p.   (MIRA 15:12)
    (Elastic plates and shells)

KORENEV, B.G. (Moskva)

Design of industrial structures for the effect of operational
dynamic loading. Stroi.mekh.i rasch.soor. 4 no.4:36-43 '62.
(MIRA 15:8)
(Structures, Theory of)   (Industrial buildings)

KORENEV, B.G., doktor tekhn.nauk, prof., red.; ZUBKOVA, M.S., red.izd-
va; KOROBKOVA, N.N., tekhn. red.

[Vibrations of buildings and structures]Kolebaniia zdanii i
sooruzhenii. Pod red. B.G.Koreneva, Moskva, Gosstroiizdat,
1963. 221 p.   (MIRA 16:3)

1. Akademiya stroitel'stva i arkhitektury SSSR. Institut
stroitel'nykh konstruktsiy.
          (Structures, Theory of)

GOL'DENBLAT, I.I.; KORENEV, B.G.; RABINOVICH, I.M.; SMIRNOV, A.F.

Concerning the article by A.A.Pikovskii and A.A.Derkachev, "Dynamic theory of stability." Stroi.mekh.i rasch.soor. 5 no.2:44-47 '63.   (MIRA 16:6)

(Stability)

KORENEV, B.G. (Moscow)

"Modern problems of structural dynamics".

report presented at the 2nd All-Union Congress on Theoretical and Applied
Mechanics, Moscow, 29 Jan - 5 Feb 64.

ISHKOVA,A.G.;KORENEV,B.G.   (Moscow)

"The bending of plates on an elastic and elastic-plastic
foundation"

report presented at the 2nd All-Union Congress on Theoretical
and Applied Mechanics, Moscow, 29 Jan - Feb 64.

KORENEV, B.G.

Problems in the dynamics of structures in relation to the development of the chemical industry. Strci.mekh. i rasch.soor. 6 no.3:1-3 '64.

(MIRA 18:1)

KORENEV, B.G.

Some two-dimensional thermoelasticity problems involving periodic influence of heat. Dokl. AN SSSR 164 no.2:294-297 S '65.   (MIRA 18:9)

1. TSentral'nyy nauchno-issledovatel'skiy institut stroitel'nykh konstruktsiy im. V.A. Kucherenko. Submitted February 19, 1965.

ACC NR: AT7007032   (A)   SOURCE CODE: UR/0000/66/000/000/0213/0226

AUTHOR: Korenev, B. G. (Moscow)

ORG: None

TITLE: Impulse action on fluid-filled cylindrical and prismatic containers

SOURCE: Stroitel'naya mekhanika (Structural mechanics). Moscow, Stroyizdat, 1966,
213-226

TOPIC TAGS: ideal fluid, oscillation, fluid dynamics

ABSTRACT: The author considers oscillations of an ideal fluid in a vertical cylindri-
cal or prismatic container subjected to the action of a horizontal pulse. The pres-
sures transmitted by this action to the walls and bottom of the container are analyzed
together with those acting on columns inside the container. Particular attention is
given to the specific problem of fluid oscillations in a circular cylindrical contain-
er with an off-center circular column. The problem is considered within the framework
of the theory of gravitational waves assuming that the fluid is at rest when $t=0$. At
this moment the container is put into translational motion in the horizontal direction.
The motion of the fluid with respect to the moving container is analyzed assuming that
the upper surface of the fluid is free. The resultant equations are used for deter-
mining the effect of central and off-center columns on the pressure against the walls

Card   1/2

ACC NR: AT7007032

of the container. The coefficients appearing in the formulas are calculated. The
problem of fluid oscillations in containers with noncircular cross sections is also
considered. Orig. art. has: 5 figures, 8 tables, 46 formulas.

SUB CODE: 20/   SUBM DATE: None/   ORIG REF: 004/   OTH REF: 002

Card   2/2

BRAGIN, A.A.; KORENEV, D.P.

     Telemetering system for spectrometric studies of wells. Vop. pered.
inform. 3:122-124 '64.
                                               (MIRA 18:1)

KOHENEV, G.

Flow of popular initiative. Mast. ugl. 7 no.11:3-4 N '58.
(MIRA 11:12)

1.Predsedatel' Stalinskogo obkoma profsoyuza rabochnikh ugel'noy
premyshlennosti.
(Coal mines and mining)

SHESTAK, S.S., nauchnyy sotrudnik; KORENEV, G.P.; KORENEVA, T.A.;
SAPOGOV, A.G., nauchnyy sotrudnik

Use of SZHK (pregnant mare's serum). Veterinariia 37 no.1:10-12
Ja '60. (MIRA 16:6)

1. Orenburgskaya nauchno-issledovatel'skaya veterinarnaya stantsiya
(for Shestak). 2. Direktor Simferopol'skoy mezhsovkhoznoy labora-
torii (for Korenev). 3. Simferopol'skaya mezhsovkhoznaya
laboratoriya (for Koreneva). 4. Turkmenskaya NIIZhV (for Sapogov).
(Serum therapy) (Veterinary medicine)

ROMANOV, V.M.; TSAREGORODTSEV, A.Kh.; NESTEROVA, Yu.F.; KORENEV, G.P.;
        MILENT'YEV, A.A.

    Groundless refusal to act on the basic link in the prevention
    of brucellosis (reply to S.M. Smirnov's article "Results and
    prospects of burucellosis prevention in the U.S.S.R." in "Zhur.
    mikrobiol.epid 1 immun., No.11, 1958). Zhur.mikrobiol.epid.1
    immun. 31 no.2:144-146 F '60.   (MIRA 13:6)
                (BRUCELLOSIS)   (SMIRNOV, S.M.)

ALEKSANDROV, N.I.; GEFEN, N.Ye.; GAPOCHKO, K.G.; GARIN, N.S.; GORDON, G.Ya.
KOZHUSHKO, M.I.; KORENEV, G.P.; LAZAREVA, Ye.S.; LEYKEKHMAN, Ye.P.;
MASLOV, A.I.; PAVLOV, G.A.; POLIVANOV, N.D.; ROMANOV, P.S.; RYBAKOV,
P.S.; RYBAKOV, M.G.; SAMOKHVALOV, M.F.; SMIRNOV, M.S.; SHTERN, M.A.;
CHEPKOV, V.N.

Experience with mass aerosol immunization with tularemia dust
vaccine. Zhur. mikrobiol., epid. i imm. 41 no. 2:16-43 F '64.
(MIRA 17:9)

L 23604-65   EWT(L)   IJP(c)

AM4045255   BOOK EXPLOITATION   S/

$B+1$

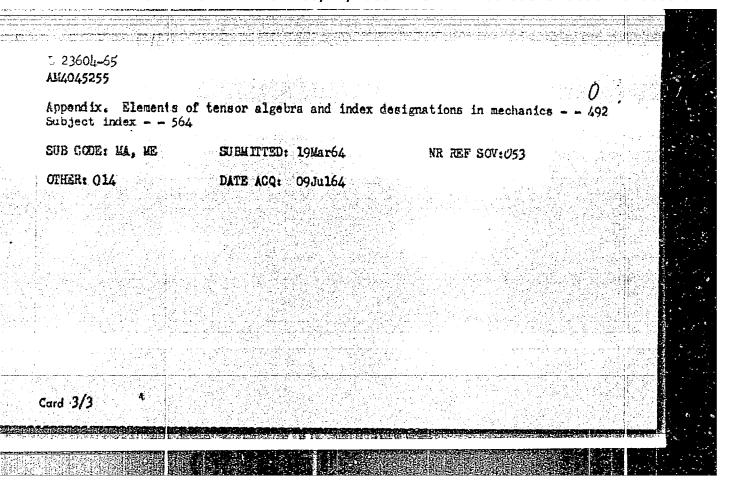Korenev, Georgiy Vasil'yevich

Introduction to the mechanics of controllable objects (Vvedeniye v mekhaniku upravlyuyemogo tela) Moscow, Izd-vo Nauka, 1964. 568 p. illus., append., index. Errata slip inserted. 5200 copies printed. Editor: G. M. Il'icheva; Technical editor: A. P. Kolesnikova; Proofreader: S. N. Yemel'yanova.

TOPIC TAGS: cybernetics, controllable object, controllable point, mechanics of motion, solid mechanics, three dimensional motion, two dimensional motion, tensor algebra, linear approximation

PURPOSE AND COVERAGE: The coverage is indicated by the Table of Contents. It should be noted that "controllable objects" are defined as all means of transport, loading, displacement, and assembly, utilizing cranes, helicopters, guided missiles, etc. Many new concepts and different coordinate systems are introduced in the book.

Card 1/3

L 23604-65
AM4045255

TABLE OF CONTENTS: C

Card 2/3

L 23604-65
AM4045255

Appendix. Elements of tensor algebra and index designations in mechanics -- 492
Subject index -- 564

SUB CODE: MA, ME   SUBMITTED: 19Mar64   NR REF SOV:053

OTHER: 014   DATE ACQ: 09Jul64

Card 3/3

KAN, Veniamin Lipmanovich; KEL'ZON, Anatoliy Saulovich. Prinimali
uchastiye: MINTSBERG, B.L.; USHAKOVA, G.N.; KORENEV, G.V.,
kand. fiz.-mat. nauk, retser-ent; MERKIN, D.R., doktor
fiz.-mat. nauk, retsenzent; ROZENGAUZ, N.M., red.

[Theory of proportional navigation] Teoriia proportsional'-
noi navigatsii. Leningrad, Sudostroenie, 1965. 423 p.
(MIRA 18:10)

KORENEV, G.V., kand. sel'skokhoz. nauk

Productive qualities of the seed of winter grain crops. Zemledelie
27 no.7:80-81 Jl '65.   (MIRA 18:7)

1. Khar'kovskiy sel'skokhozyaystvennyy institut.

KORENEV, G.V., kand.sel'skokhoz. nauk

Development of grain during harvesting by stages. Zemledelie 26
no.8:76-79 Ag '64.   (MIRA 17:11)

1. Khar'kovskiy sel'skokhozyaystvennyy institut.

KORENEV, G.V.

LOKK, A.D. [Locke, Arthur S.] KORENEV, G.V. [translator]; LEVANTOVSKIY, V.I., red.; GAVRILOV, S.S., tekhn.red.

[Guidance. Translated from the English] Upravlenie snariadami. Moskva, Gos. izd-vo tekhniko-teoret. lit-ry, 1957. 775 p. (Guided missiles) (MIRA 11:5)

KORENEV, G. V.

Grasses

Sprouting and growing perennial grasses (Gramineaw).. Sov. agron. 10, no. 3, 1952

Monthly List of Russian Accessions, Library of Congress, May 1952.   UNCLASSIFIED

KORENEV, G.V., dotsent

Harvesting grain in separate stages.   Zemledelie 8 no.7:47-52 Jl '60.
(MIRA 13:9)

1. Kafedra rasteniyevodstva Khar'kovskogo sel'skokhozyaystvennogo
instituta.
(Grain— Harvesting)

KORENEV, I.P.

Changes in the sebaceous glands of the rabbit skin under the effect
of ultraviolet rays. Vest.derm. i ven. 38 no.5:42-45 My '64.

(MIRA 18:12)

1. Zaporozhskiy institut usovershenstvovaniya vrachey imeni
Gor'kogo (nauchnyye rukovoditeli - prof. A.F.Ukhin i prof. G.A.
Koblov). Submitted July 2, 1963.

LYSOV, K.I.; KORENEV, I.Ye.

Laboratory testing of the chamber type water supply to axial pumps. Trudy MPI 157:63-73 '64.
(MIRA 19:1)

LYSOV, K.I.; KORENEV, I.Ye.

    Results of laboratory studies of several types of water pipes
with vertical axial pumps. Trudy NPI 138:49-66 '63.

                                        (MIRA 16:10)

DMITRIYEV, B.A., kand. tekhn. nauk; KORENEV, K.D.; TSVETKOV, O.N.

Synthesis of OP washing compounds from phenols extracted peat oils. Torf. prom. 38 no.6:24-28 '61.   (MIRA 14:9)

1. AN SSSR (for Dmitriyev). 2. Kalininskiy torfyanoy institut (for Korenev, TSvetkov).
         (Cleaning compounds) (Peat)

DMITRIYEV, S.A., kand.tekhn.nauk; KORENEV, K.D., inzh.; TSVETKOV, O.N., inzh.

Continuous alkylation of peat phenols in the presence of ion
exchange resin. Torf. prom. 39 no.8:16-18 '62.   (MIRA 16:1)

1. Institut goryuchikh iskopayemykh.
            (Alkylation) (Phenols) (Ion exchange)

TSVETKOV, O.N.; DMITRIYEV, S.A.; KARAVAYEV, N.M.; KORENEV, K.D.

Coal chemical cresols as raw material for the production of
surface-active substances. Koks i khim. no.10:40-44 '63.
(MIRA 16:11)

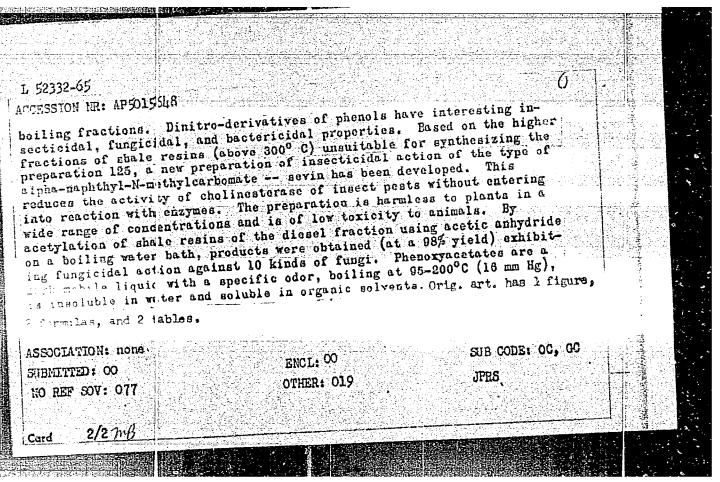1. Institut goryuchikh iskopayemykh AN SSSR.

KORENEV, K.D.; DMITRIYEV, S.A.; KARAVAYEV, N.M.; TSVETKOV, O.N.

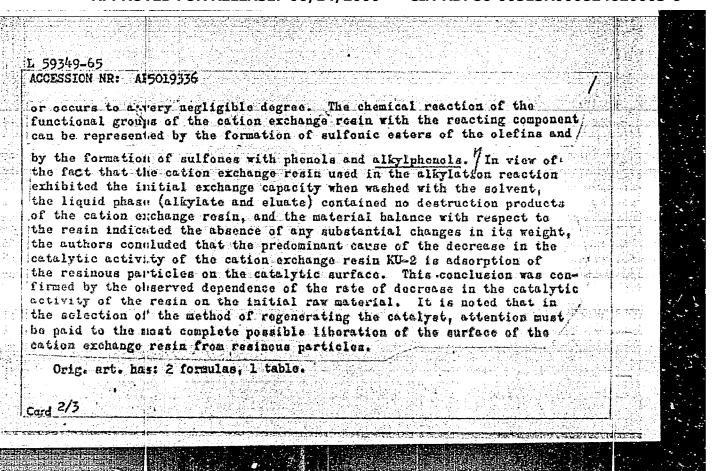Phenols of oil shale tar as raw material for the chemical industry.
Khim. prom. no.6:401-407 Je '64.   (MIRA 18:7)

L 52332-65   EWA(j)/IWA(b)-2/EWT(1)   Pe-4   RO

ACCESSION NR: AP5015618   UR/0064/64/000/007/0484/0491   2 4/

                                                                              β

AUTHOR: Korenev, K. D.; Karavayev, N.M.;Dmitriyev,S.A.; Tsvetkov, O. N.

TITLE: Phenols from shale resin--raw material for the chemical industry

SOURCE: Khimicheskaya promyshlennost', no. 7, 1964, 484-491

TOPIC TAGS: phenol, shale oil, tanning material, insecticide, fungicide

Abstract: One of the first products obtained from shale phenols are
synthetic tannides used as tanning agents. Sulfonation of phenols pro-
motes increased tanning properties of products synthesized from the
phenols. However, this stage is complicated by the tendency of shale
resins to be oxidized, and also by the steric hindrance of polysubsti-
tuted phenols. A sulfide-cellulose extract containing ligninsulfoacids
and carbohydrates is used for condensation with sulfonated phenols. The
optimal ratio of reagents is 0.3:1.0. The condensation products (viscous
dark-brown mass soluble in water) have good tanning properties. Studies
have shown that it is possible to replace natural tanning agents with a
preparation made from shale resins. The tanning agents can be obtained
both from purified and crude shale resins, from high-boiling and low-

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L 52332-65

ACCESSION NR: AP5015548

boiling fractions. Dinitro-derivatives of phenols have interesting in-
secticidal, fungicidal, and bactericidal properties. Based on the higher
fractions of shale resins (above 300° C) unsuitable for synthesizing the
preparation 125, a new preparation of insecticidal action of the type of
alpha-naphthyl-N-methylcarbomate -- sevin has been developed. This
reduces the activity of cholinesterase of insect pests without entering
into reaction with enzymes. The preparation is harmless to plants in a
wide range of concentrations and is of low toxicity to animals. By
acetylation of shale resins of the diesel fraction using acetic anhydride
on a boiling water bath, products were obtained (at a 98% yield) exhibit-
ing fungicidal action against 10 kinds of fungi. Phenoxyacetates are a
mobile liquic with a specific odor, boiling at 95-200°C (16 mm Hg),
is insoluble in water and soluble in organic solvents. Orig. art. has 1 figure,
2 formulas, and 2 tables.

ASSOCIATION: none

SUBMITTED: 00   ENCL: 00   SUB CODE: OC, OC

NO REF SOV: 077   OTHER: 019   JPRS

Card   2/2 ph

L 59349-65   EP(c)/EWT(m)/EWG(m)   Pr-4   RM/RWH

ACCESSION NR: AP5019336   UR/0020/64/157/005/1171/1173

AUTHOR: Tsvetkov, O. N.; Korenev, K. D.; Dmitriyev, S. A

TITLE: Problems of the use of the cation exchange resin KU-2 in the process of alkylation of phenols with higher olefins

SOURCE: AN SSSR. Doklady, v. 157, no. 5, 1964, 1171-1173

TOPIC TAGS: ion exchange resin, catalysis, alkylation, phenol, ion exchange

ABSTRACT: Phenol and a technical mixture of cresols were alkylated with propylene trimer in the presence of the cation exchange resin KU-2 in the H-form, dried to constant weight, and the reaction products and spent catalyst were investigated, in an effort to elucidate the main causes of the decrease in the catalytic activity of cation exchange resins, which is of great significance in the selection of the method and conditions of catalyst regeneration. Since the alkylation products did not contain sulfur, it was concluded that cleavage of the cation exchange resin under the conditions of the alkylation process and elution of the low-molecular fragments of destruction either generally does not occur

Card 1/3

L 59349-65
ACCESSION NR: AP5019336

or occurs to a very negligible degree. The chemical reaction of the
functional groups of the cation exchange resin with the reacting component
can be represented by the formation of sulfonic esters of the olefins and
by the formation of sulfones with phenols and alkylphenols. In view of
the fact that the cation exchange resin used in the alkylation reaction
exhibited the initial exchange capacity when washed with the solvent,
the liquid phase (alkylate and eluate) contained no destruction products
of the cation exchange resin, and the material balance with respect to
the resin indicated the absence of any substantial changes in its weight,
the authors concluded that the predominant cause of the decrease in the
catalytic activity of the cation exchange resin KU-2 is adsorption of
the resinous particles on the catalytic surface. This conclusion was con-
firmed by the observed dependence of the rate of decrease in the catalytic
activity of the resin on the initial raw material. It is noted that in
the selection of the method of regenerating the catalyst, attention must
be paid to the most complete possible liberation of the surface of the
cation exchange resin from resinous particles.

Orig. art. has: 2 formulas, 1 table.

Card 2/3

L 59349-65
ACCESSION NR: AP5019336

ASSOCIATION: Institut goryuchikh iskopayemykh Goskomiteta po toplivnoy promyshlennosti pri Gosplane SSSR (Institute of Fuels, Committee on the Fuel Industry under Gosplan SSSR)

SUBMITTED: 21Apr64   ENCL: 00   SUB OCODE: MT, GC

NR REF SOV: 006   OTHER: 000   JPRS

Card 3/3

TOVPENETS, Ye.S., kand. tekhn. nauk; IVASHCHENKO, V.M., inzh.; STYCHINSKIY, L.P., inzh.; ZHUKOV, A.I., inzh.; MERSHCHIY, N.P., inzh.; KORENEV, K.I., inzh.; SHUMEYKO, R.I., inzh.; IVANOV, F.I., inzh.

Mechanical properties of reinforcement rods after heat treatment from the rolling process temperature. Stal' 25 no.2:157-160 F '65.

(MIRA 18:3)

1. Donetskiy politekhnicheskiy institut; Makeyevskiy metallurgicheskiy zavod; Nauchno-issledovatel'skiy institut "Donpromstroy" i Novo-Kramatorskiy zavod tyazhelogo mashinostroyeniya.

L 27090-66 EWT(m)

ACC NR: AP6017412   SOURCE CODE: UR/0097/65/000/010/0015/0018

AUTHOR: Gorodnitskiy, F. M. (Candidate of technical sciences); Yukhvets, I. A. (Candidate of technical sciences); Korenev, K. I. (Engineer); Rieskind, B. Ya. (Engineer); Shumeyko, R. I. (Engineer); Livchak, T. N. (Engineer); Litvinov, A. A. (Engineer); Makarevich, A. A. (Engineer)

ORG: none

TITLE: Properties of high-strength reinforcement material subjected to electrical heating

SOURCE: Beton i zhelezobeton, no. 10, 1965, 15-18

TOPIC TAGS: concrete, wire, solid mechanical property

ABSTRACT: Specimens of high-strength reinforcing wire for concrete were subjected to mechanical tests to determine the effects of electrothermal prestressing on the strength of reinforcing materials. The experimental procedure is described and the mechanical characteristics, chemical composition and geometric shape of the various wires studied are given. It is found that the optimum pretensioning temperature (i.e. the highest temperature which does not reduce the ultimate strength of the wire) is 400°C for a 5-mm wire and 350°C for a 3-mm wire. These temperatures meet the standard requirements for permanent elongation of wire which is not low-temperature annealed during manufacture. Since 3-mm wire is not sufficiently tensioned

UDC: 666.982.4

Card 1/2

Card 2/2

LOPATINA, O.F., starshiy nauchnyy sotr.; KORENEV, K.N., inzh.;
ANDREYEV, I.D., nauchnyy sotr.; SHESTOPALOV, D.I., agr.; YESIKOV,
P.R., agr.; MOLOTKOV, P.S., red.; ITUNINA, R.G., red.; SERADZSKAYA,
P.G., tekhn. red.

[Manual on wages and the establishment of work norms on collective
farms] Spravochnik po oplate i normirovaniiu truda v kolkhozakh.
Voronezh, Voronezhskoe knizhnoe izd-vo, 1959. 189 p.
(MIRA 15:4)

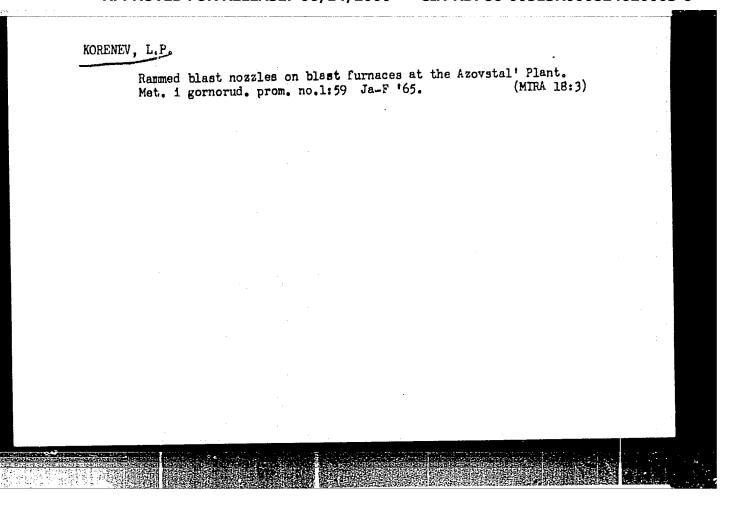1. Voronezh,(Province) Oblastnoye upravleniye sel'skogo khozyaystva.
2. TSentral'no-chernozemnyy filial Vsesoyuznogo nauchno-
issledovatel'skogo instituta ekonomiki sel'skogo khozyaystva (for
Lopatina, Andreyev). Voronezhskoye oblastnoye upravleniye sel'skogo
khzyaystva (for Korenev, Shestopalov, Yesikov).
(Voronezh Province--Collective farms--Income distribution)
(Voronezh Province--Collective farms--Production standards)

TSVETKOV, O.N.; KORENEV, K.V.; DMITRIYEV, S.A.; KARAVAYEV, N.M.

Mechanism underlying the alkylation of phenols by higher olefins
in the presence of cation-exchange resins. Dokl. AN SSSR 162 no.4:
833-835   Je '65.   (MIRA 18:5)

1. Institut goryuchkikh iskopayemykh AN SSSR. 2.Chlen-korrespondent
AN SSSR (for Karavayev).

KORENEV, L.P.

    Rammed blast nozzles on blast furnaces at the Azovstal' Plant.
    Met. i gornorud. prom. no.1:59 Ja-F '65.   (MIRA 18:3)

CHERVONYY, A., doktor tekhn.nauk, polkovnik; KORENEV, M., inzhener-
      podpolkovnik

      Indexes of the reality of firing operations. Voen.vest. 42
      no.9:86-88 S '62.   (MIRA 15:8)
                  (Artillery)

CHEL VONYY, A., polkovnik, doktor tekhn.nauk; KORENEV, M., inzhener-
        podpolkovnik

        Evaluating the effectiveness of fire. Voen. vest. 42 no.1:
        77-81 Ja '63.   (MIRA 17:4)

L 63967-65

ACCESSION NR: AI5022495   UR/0089/65/018/006/0647/0648

AUTHOR: Korenev, M. A.; Nevskiy, B. V.; Zorina, Z. P.; Ambartsumyan, Ts. L.;
Nazarenko, N. G.

TITLE: Precipitation of uranyl and ammonium arsenates and some of their properties

SOURCE: Atomnaya energiya, v. 18, no. 6, 1965, 647-648

TOPIC TAGS: uranium compound, uranyl nitrate, ammonium compound,
arsenate, chemical precipitation

ABSTRACT: X ray and thermographic analysis of uranyl nitrates (with 0.5g/l
uranium) showed that as 20°C and arsenic-uranium near stoichiometric the precipi-
taion of uranyl and ammonium arsenates from uranyl nitrates began at pH $\approx$ 1.5.
At pH = 2.5 the main part of uranium precipitation was accomplished by the ammonium
neutralization. Prepared uranyl and ammonium arsenater looked like a fine crystal
line, lemon-yellow powder with bright green luminescence in ultraviolet light with
the chemical formula $UO_2NH_4AsO_4 \cdot 3H_2$). Formation of uranyl and ammonium arsenates

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L 63967-65

ACCESSION NR: AP5022495

and di- and trivalent iron and aluminum arsenates as functions of uranium (0.250g/l) concentration and pH of the solution was determined. The pH values for the initial and final uranyl and ammonium arsenates precipitation were determined. The constructed curves show that uranyl and ammonium arsenates and trivalent iron co-precipitated at close pH values which prevents selective uranium separation. Precipitation of divalent iron and aluminum begins at larger pH than uranium therefore selective precipitation of uranium is easily achieved in the presence of divalent iron and aluminum ions. Orig. art. has: 2 graphs, 4 figures.

ASSOCIATION: none

SUBMITTED: 13May64   ENCL: 00   SUB CODE: IC, GC

NR REF SOV: 004   OTHER: 004   NARS

Card 2/2

KORENEV M. S.

1061. Korenev, M. S. The theoretical bases of the processes of the cleaning of gas and air to remove dust particles in the layers of various packs (in Russian), (Gos. Soyuz. i-i avtomob. i avtomotor in-t, no. 72) Moscow, Mashgiz, 1954, 24 pp. + illus. 75 kob.; Ref. Zh. Mekh. 1956, Rev. 6075.

Processes are investigated dealing with the separation of dust particles when air is passed through the packs present in filters used in motors and tractors. Author is of the view that the process of removal of particles of dust from the gas consists of two stages. In the first stage the dust particles separate out, basically, under the action of forces of inertia, which develop as a consequence of multiple small revolutions of the flow in the pack layers. In the second stage of the gas cleansing, the active part is played, basically, by the impact of the dust particles on the surface of the solid or liquid bodies.

A suitable formula is deduced to calculate the coefficient of cleansing. A formula is given for the evaluation of the resistance of the pack in relation to its working time at given through-puts of air and the constructive parameters of the pack. Examples are given, utilizing the formulas cited in the article.

L. E. Idel'chik, USSR

Courtesy Referativnyi Zhurnal

Translation, courtesy Ministry of Supply, England

KORENEV, M. S.

USSR/Engineering - Air cleaners

Card 1/1   : Pub. 12 - 3/16

Authors   : Korenev, M. S.

Title   : Air cleaners for automobile engines

Periodical   : Avt. trakt. prom. 8, 8-12, Aug 1954
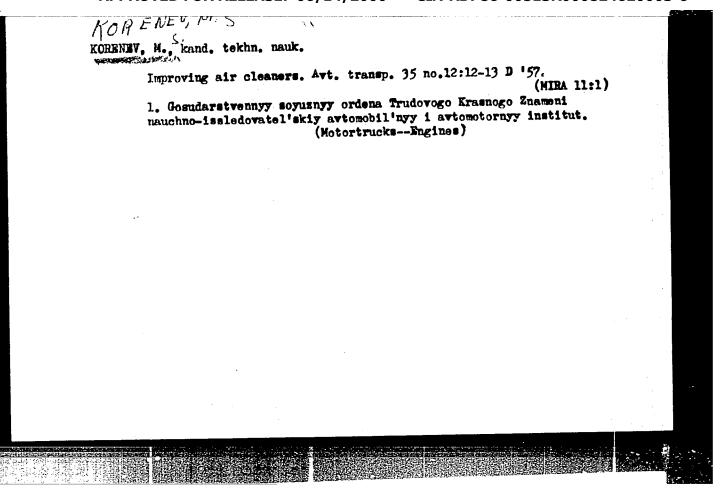
Abstract   : The operation of automobile air cleaners under various weather
               conditions was investigated. The tests were conducted on air
               cleaners type VM-9, VM-9I, VM-11, and VM-9Ts. Diagrams depicting
               the above mentioned air cleaners are presented, together with tables
               and graphs giving technical data on their operational characteristics.

Institution : ......

Submitted   : ......

KOR ENEⁱ, M: S

KORENEV, M., kand. tekhn. nauk.

Improving air cleaners. Avt. transp. 35 no.12:12-13 D '57.

(MIRA 11:1)

1. Gosudarstvennyy soyuznyy ordena Trudovogo Krasnogo Znameni nauchno-issledovatel'skiy avtomobil'nyy i avtomotornyy institut.
(Motortrucks--Engines)

KORENEV M.S.

117-3-26/28

AUTHOR: Aristov, I.A., Engineer,

TITLE: Conference on Problems of Automobile Engine Life (Konferentsiya po povysheniyu dolgovechnosti avtomobil'nykh dvigateley)

PERIODICAL: Mashinostroitel', 1958, # 3, p 47 (USSR)

ABSTRACT: The conference was organized by the NTO Mashprom and convened in 1957 in Moscow. A number of 230 delegates from automobile plants, research institutes, and higher technical schools participated.
    The following persons delivered reports: Deputy Chief Designer of the Yaroslav Automobile Plant P.I. Novikov, leading designer of the Khar'kov Plant "Serp i Molot", M.K. Kubata, leading designer of the Moscow Plant of Small Engine Displacement Automobiles (Moskovskiy zavod malolitrazhnykh avtomobiley), V.A. Mitrofanov, Candidate of Technical Sciences A.D. Kuritsina of the Machine Institute of the USSR Academy of Sciences (Institut mashinovedeniya Akademii nauk SSSR), scientific worker of NAMI A.G. Al'perovich ("Life of Modern Engines of Soviet and Foreign Make"), Candidate of Technical Sciences M.S. Korenev (of NAMI) ("On Application of Highly Effective Air Filters for Increasing the Life of Automobile Engines").

Card 1/3

Card 2/3   process can produce gas corrosion at high temperature, which

Conference on Problems of Automobile Engine Life   117-3-26/28

apparently explains the high rate of wear in the upper part of the cylinder lining and the piston rings.
    Candidate of Technical Sciences D.I. Vysotskiy (NAMI) made a report on investigation methods with the use of radioactive isotopes. Candidate of Technical Sciences A.I. Niskevich (NATI) announced that NATI has used radioisotopes for 5 years in testing the wear resistance of materials under laboratory conditions, as well as for evaluating the wear rate of the piston rings of "Д-35" and "Д-54" tractors in test running.
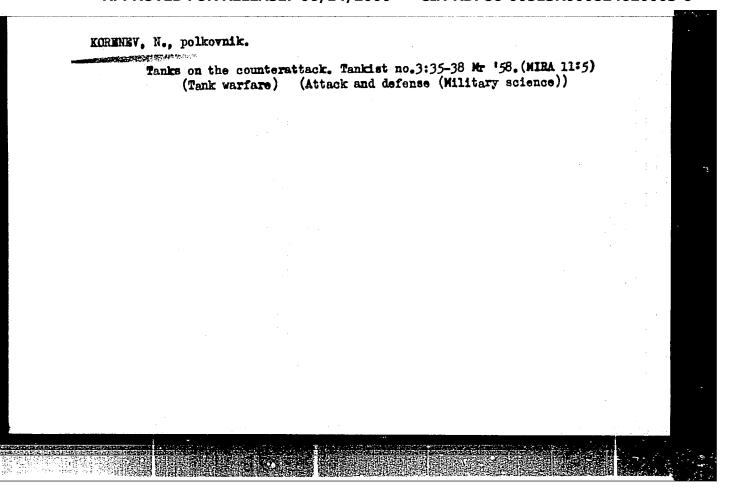
AVAILABLE: Library of Congress

Card 3/3

KORENEV,N., pilot-instruktor podrazdeleniya.

Training of young aircraft commanders. Grazhd. av. 12 no.4:9-11
Ap '55.   (MIRA 8:9)
                    (Aeronautics--Study and teaching)

KORENEV, N., polkovnik.

Tanks on the counterattack. Tankist no.3:35-38 Mr '58.(MIRA 11:5)
(Tank warfare) (Attack and defense (Military science))

KOTEL'NIKOV, N.V.; KORENEV, N.A.; YERMOLINA, T.D.

Effect of the bath and its temperature on the magnetic proper-
ties of the nickel layer obtained by the chemical method. Izv.
Sib. otd. AN SSSR no.6:105-107 '62   (MIRA 17:7)

1. Permskiy gosudarstvennyy universitet.

$24,2200$

S/020/62/143/004/023/027
B101/B138

AUTHORS: Kotel'nikov, I. V., Korenev, N. A., and Yermolina, T. D.

TITLE: Temperature dependence of saturation magnetization, and the magnetic structure of nickel films obtained by the chemical method

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 143, no. 4, 1962, 908-910

TEXT: The magnetic behavior of chemically precipitated nickel films was investigated. (I) Ni was precipitated at $87^\circ C$ from a bath of $(g/1)$ 30 nickel sulfate, 10 sodium hypophosphite, and 10 sodium acetate. The same surface (12.5 cm^2) was treated with different bath volumes: 15-ml bath changed 24 times (1); 70-ml bath changed 18 times (2), and 500-ml bath changed 3 times (3). It was found that the coatings consisted of ferromagnetic and nonferromagnetic layers, and had different I_s temperature dependences. (Fig. 1). (II) 15 copper samples were successively coated for 10 min each in a 500-cm^3 solution. The last three samples were no

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KOTEL'NIKOV, N.V.; KORENEV, N.A.; YERMOLINA, T.D.

Temperature dependence of the magnetization saturation and the
magnetic structure of nickel films prepared by a chemical method.
Dokl. AN SSSR 143 no.4:908-910 Ap '62.   (MIRA 15:3)

1. Permskiy gosudarstvennyy universitet im. A.M.Gor'kogo.
Predstavleno akademikom A.V.Shubnikovym.
                    (Nickel--Magnetic properties)

41574
S/020/62/146/004/006/015
B104/B102

14.2200

AUTHORS: Kotel'nikov, N. V., Korenev, N. A., Malinen, P. A.,
             Yermolina, T. D.

TITLE: Magnetic properties and structure of nickel films produced
             by chemical methods

PERIODICAL: Akademiya nauk SSSR. Doklady, v.146, no. 4, 1962, 797 - 798

TEXT: The specimens (Table 1) were produced and studied by methods fully
described in a previous paper (N. V. Kotel'nikov et al., DAN, 143, no. 4,
908 (1962)). A nickel wire was fastened to a copper backing and nickel was
precipitated for 20 min at a bath temperature of 87°C, the bath being re-
newed every 5 minutes. The specimens 2, 3, 4, and 5 showed ferromagnetic
properties (hysteresis loops) when the magnetic field had an amplitude of
84 oe and a frequency of 50 cps. With stronger fields, specimen 1 too
showed ferromagnetic properties. Freshly produced specimens were amorphous
or crystalline. Amorphous specimens showed no ferromagnetic properties.
X-ray pictures of specimens 1 and 4 show blurred lines of β-Ni. A fine
dispersion of the precipitates is inferred from the blurred quality of the
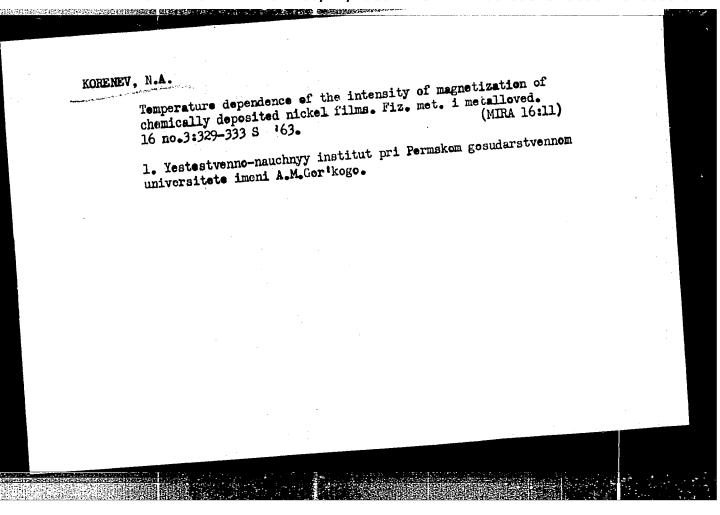lines depending on the reflection angle. The x-ray picture of specimen 6
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Magnetic properties and structure ...

S/020/62/146/004/006/015
B104/B102

is typical of an "amorphous" body with diffuse lines corresponding to an interplanar spacing of d = 2.03 Å and somewhat shifted as compared with the (111) lines of the cubic nickel lattice. There are 3 figures and 1 table.

ASSOCIATION: Permskiy gosudarstvennyy universitet im.A. M. Gor'kogo (Perm' State University imeni A. M. Gor'kiy)

PRESENTED: May 10, 1962, by A. V. Shubnikov, Academician

SUBMITTED: May 9, 1962

Table 1.

Card 2/2 Table 1

(1)	(2a)	(2b)	(2c)	(3)	(4)	(5)
1	30	10	15	3,6	—	—
2	30	10	12	5,1	35,2	7,95
3	30	10	10	5,2	66,3	12,5
4	30	10	8	6,6	71,8	3,96
5	30	10	6,5	7,4	—	—
6	30	10	5	5,8	—	—

KOTEL'NIKOV, N.V.; KORENEV, N A.; MALINEN, P.A.; YERMOLINA, T.D.

Effect of annealing on the magnetic properties and structure of
nickel obtained by a chemical method. Izv. SO AN SSSR no.10:142-
146 '63.   (MIRA 17:11)

1. Permskiy gosudarstvennyy universitet.

KORENEV, N.A.

Temperature dependence of the intensity of magnetization of chemically deposited nickel films. Fiz. met. i metalloved.
16 no.3:329-333 S '63.

(MIRA 16:11)

1. Yestestvenno-nauchnyy institut pri Permskom gosudarstvennom universitete imeni A.M.Gor'kogo.

ACCESSION NR: AP4009193   S/0288/63/000/003/0142/0146

AUTHOR: Kotel'nikov, N. V.; Korenev, N. A.; Malinen, P. A.; Yermolina, T. D.

TITLE: The effect of annealing on the magnetic properties and structure of nickel obtained by a chemical method

SOURCE: AN SSSR. Sibirskoye otdeleniye. Izv. Seriya tekhnicheskikh nauk, no. 3, 1963, 142-146

TOPIC TAGS: nickel precipitates, chemical nickel precipitates, amorphous nickel structure, crystalline nickel structure, annealed nickel, beta-nickel crystal lattice, nickel ferromagnetic properties, ρ -Ni

ABSTRACT: Precipitates of nickel obtained by a chemical method have a complex structure, resulting from the presence of phosphor in them (K.M. Gorbunov and A.A. Nikiforova, Fiziko-khimicheskoye osnovy* protsessa khimicheskogo nikeliro-vaniya. Izd-vo AN SSSR, M., 1960). The magnetic and other properties of precipitates are determined by their internal structure. According to data from a series of investigations carried out by various methods (Gorbunov and Nikifo-rova; V.P. Moiseyev, Izv. AN SSSR, ser. fiz., t. 26, No. 3, 378, 384, 1962),

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ACCESSION NR: AP4009193

precipitates of chemically reduced hypophosphite of nickel in the initial state have an amorphous structure which changes to crystalline during heat processing. According to Kotel'nikov, Korenev and others (DAN SSSR, v pechati), who recently carried out structure studies using x-ray's, precipitates in the initial state may have not only an amorphous, but a crystalline structure besides; it was also observed that samples obtained with a crystalline structure have ferromagnetic properties, whereas amorphous-structured samples do not. In the present article, on the basis of the forementioned articles and others, samples with ferromagnetic properties have been produced, which, as x-ray studies show, have a crystal structure in agreement with previous data. The effect of annealing on the ferromagnetic properties and structure of precipitates of the samples produced has been studied, with the following conclusions: 1) precipitates of nickel obtained chemically have in the initial state not only an amorphous, but also a crystalline structure with a lattice, characteristic of β -Ni; 2) all samples having a crystalline structure in the initial state have ferromagnetic properties, while samples with an amorphous structure do not have these properties; 3) the annealing of amorphous precipitates results in the appearance of ferromagnetic properties; 4) the annealing of precipitates which have a crystalline structure in the initial state results in improving the

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ACCESSION NR: AP4009193

crystal lattice β -Ni and to the occurence of new phases, as indicated by the appearance of new lines not visible before annealing; 5) together with improvement of the crystal lattice, the annealing of samples implies a change of their ferromagnetic properties; 6) the greatest change in ferromagnetic properties at a temperature of 400°C occurs in the first 20 minutes; 7) several ferromagnetic phases may appear in precipitates as a result of anneal- ing; these may be distinguished from one another, for example, by the percentage content of phosphor in similar crystalline structures of nickel; 8) improve- ment of the crystal structure β -Ni and the occurance of new phases results in an improvement of I_s and H_c for each sample as a whole, for which the latter is related to an appearance of microconnections of non-ferromagnetic phases which occur in the heat treatment process. Orig. art. has: 5 figures and 2 tables.

ASSOCIATION: Permskiy gosudarstvenny*y universitet (Perm'State University)
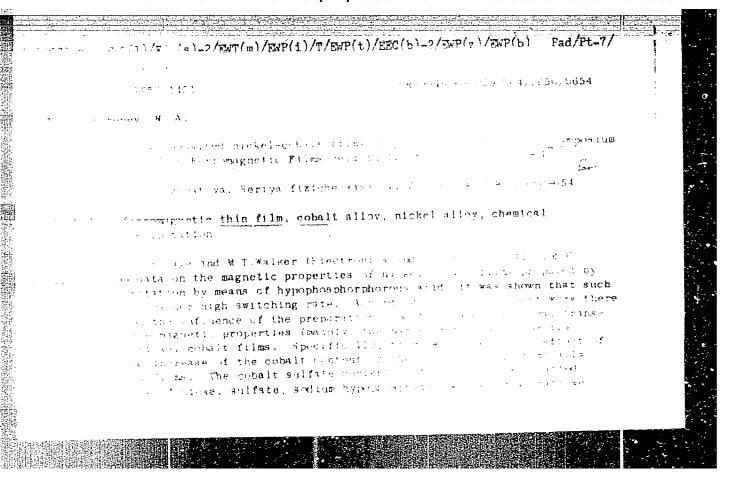
SUBMITTED: 23May62   DATE ACQ: 10Feb64   ENCL: 00

SUB CODE: CH, PH   NO REF SOV: 005   OTHER: 001

Card 3/3

... ...\/... (a)-2/EWT(m)/EWP(i)/T/EWP(t)/EEC(b)-2/EWP(?)/EWP(b)   Pad/Pt-7/

... ...

... ... H. A.

... ... nickel-cobalt film ...
... magnetic films ...

... va. Seriya fizicheskiya 54

...magnetic thin film, cobalt alloy, nickel alloy, chemical
... ...

... and W.T.Walker (Electronic ...
...ata on the magnetic properties of ... ... by
...ation by means of hypophosphorphorous acid   it was shown that such
... high switching rate. ... ... there
... the influence of the preparation ... ... trans-
... magnetic properties (mainly ... ...
... cobalt films. Specifically ... ...
... increase of the cobalt content ... ...
... ... The cobalt sulfate ... ...
... ...e, sulfate, sodium hypo... ...

ACCESSION NR: AP5011451

... that introduction of ... ... leads to ...
... and of the ...
... are ...
... X-ray ...
... ...
... are formed ferromagnetic ...
... ...
... the ...
... the preferential orientation of defects. ... --
... the coercive force, presumably due to ... of the packing defect.
... 3 figures and 3 tables.

None

ENCL: ?

OTHER: ...

SUB CODE: EM, SS

KORENEV, N.A.; MARTSENIUK, T.D.; UVAROV, A.I.

Magnetic properties and structure of cobalt films produced by
the chemical precipitation method. Izv. vys. ucheb. zav.; fiz.
8 no.1:85-88 '65.

(MIRA 18:3)

1. Yestestvenno-nauchnyy institut pri Permskom gosudarstvennom
universitete imeni Gor'kogo.

L 18827-66   EWT(1)/EWT(m)/T/EWP(t)   IJP(c)   JD/GG
ACC NR: AP6002016   (A)   SOURCE CODE: UR/0286/65/000/003/0086/0092

AUTHOR: Korenev, N. A.

ORG: Institute of Physics, Siberian Branch, AN SSSR (Institut fiziki Sibirskogo otdeleniya AN SSSR)

TITLE: Magnetic properties of chemically precipitated layers as a function of crystal lattice perfection

SOURCE: AN SSSR. Sibirskoye otdeleniye, Izvestiya. Seriya tekhnicheskikh nauk, no. 3, 1965, 86-92

TOPIC TAGS: metal deposition, nickel, magnetic property, hysteresis loop, crystal structure analysis, crystal polymorphism, lattice defect, Curie point, metal physics, crystal lattice distortion, magnetization

ABSTRACT: The effect of crystal lattice distortions (caused by various dopants) on the degree of film magnetization, the Curie point, and coercive force was studied. Nickel sulfate solutions in which the concentration of sodium hypophosphate was varied from 2 to 30 g/l were used. Changes in hysteresis loops and Curie points for these samples are graphed. The magnetization had a minimum of 11 gs at 4 g/l

UDC: 539.216.22 : 538.539.216.22 : 546.74

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Card 2/2

KORENEV, N.I.

Investigation of alloys of the system Fe-Cr and of some alloys of the system Fe-Cr-Mn by the method of magnetic analysis. N. T. Korenev and B. I. Korenev

did have a Curie point due to FeCr. Further studies were carried out on Fe-Cr alloys cont'g Mn. Rods of 2–4 mm were sealed inside a quartz tube and placed inside a porcelain tube within an elec. furnace. The air was exhausted from the porcelain tube, the furnace heated to 1200°, and thus kept for days. The temp. was then lowered within 4 days to 750, kept there for days, then lowered to 735° and again kept for 4 days, from 735° to 500° the temp. was lowered. At 500° the current was switched off and the mass cooled within the furnace. Two alloys, one with 5.5 and the other with 9.5% Mn. When the % of Mn lowered, the % of Mn also lowered the phase. The more Mn, the more pronounced was the effect. — M. Hosen

1. DAVYDOVA, N. I.; KORENEV, N. I.

2. USSR (600)

4. Saws

7. Using less electric power in operation of saws. Der. i lesokhim. prom. 2, No.
    2, 1953.

9. **Monthly List of Russian Accessions,** Library of Congress, _____May_____1953. Unclassified.

KORENEV, N.I.

Conveyor lines for assembling furniture at the Rechitsa Furniture Combine.
Der.i lesokhim.prom. 2 no.7:23 Jl '53.   (MLRA 6:5)

1. Rechitskiy mebel'nyy kombinat. (Furniture industry) (Conveying machinery)

KORENEV, N.I., inzhener; MARGOLIN, S.S., inzhener.

Making plywood from aspen with albumen glue.   Der. i lesokhim.
prom. 3 no.10:25-26 O '54.   (MLRA 7:11)

1. Rechitskiy mebel'nyy kombinat.
        (Plywood)

KORENEV, N.I.

7

Casein-formaldehyde adhesive. N. I. Korenev (Furni-ture Combine, Rechitsa). *Derevoobrabatyvayushchaya Prom.* 4, No. 10, 21-2(1955).—A plywood adhesive (I) is prepd. from casein 100, H_2O 900, formalin (40%) 0.6, and milk-of-lime (CaO + MgO not less than 60%) 12 parts by wt. In the prepn. of I, 1 part ground casein is stirred into 4 parts H_2O at 20-5° over 1.2-2 hrs., milk-of-lime and H_2O are added, and the mixt. is stirred 1 hr., the HCHO is added slowly as a 0.2% soln., and the mixt. is stirred 15-20 min. Compared with a straight casein adhesive, I has a longer useful life (6-8 hrs.) and requires less coverage (17-20 g./sq. m.). John Lake Keavy

SHESTIALTYNOV, S.I.; KORENEV, N.I.; GARELIK, Ye.M.; VYATKIN, M.D.

Drying lumber in the chamber-24 produced by the Central Scientific
Research Institute for Machine Woodworking. Der.prom. 5 no.6:18-19
Je '56.
(MIRA 9:9)

1.Rechitskiy mebel'nyy kombinat.
(Lumber--Drying)

KORENEV, N.I., inzhener.

Joiner's panels with hardboard sheathings. Der. prom. 6 no.2:
23-25 F '57.
(MLRA 10:4)

1. Rechitskiy mebel'nyy kombinat.
   (Hardboard) (Furniture industry)

Korenev, N.F.

KORENEV, N.I.; ZAKREVSKAYA, O.M.

Production and use of M-60 resin for furniture veneering. Der. (MIRA 10:11)
prom. 6 no.8:21 Ag '57.

1. Rechitskiy mebel'nyy kombinat.
        (Adhesives)   (Veneers and veneering)